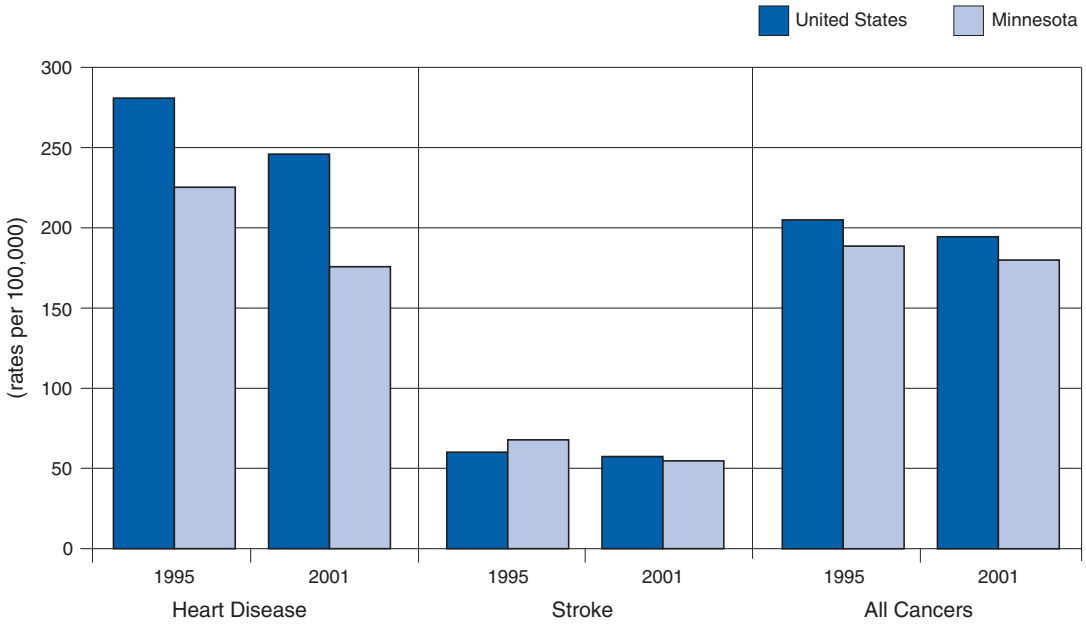
Minnesota

Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and Minnesota, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

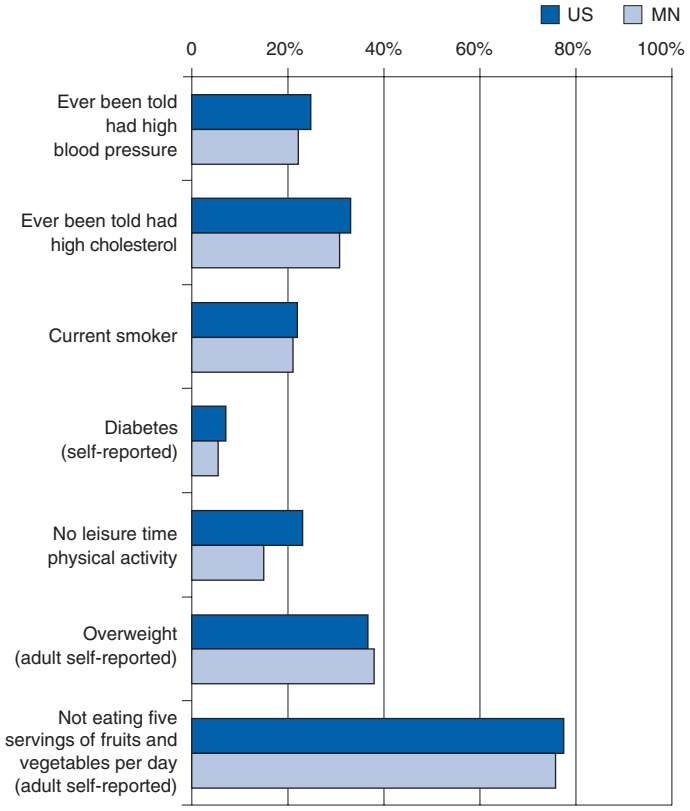
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the second leading cause of death in Minnesota, accounting for 8,760 deaths or approximately 23% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,727 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 9,360 are expected in Minnesota. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 22,720 new cases that are likely to be diagnosed in Minnesota.

Estimated Cancer Deaths, 2004

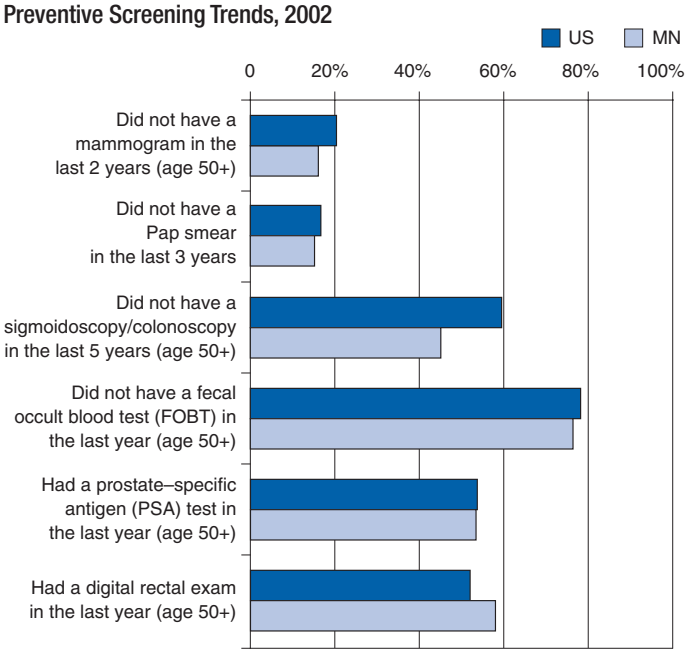
Cause of death	US	MN
All Cancers	563,700	9,360
Breast (female)	40,110	670
Colorectal	56,730	850
Lung and Bronchus	160,440	2,380
Prostate	29,900	550

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

Minnesota's Chronic Disease Program Accomplishments

Examples of Minnesota's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among African American men (490.1 per 100,000 in 1990 versus 339.0 per 100,000 in 2000).
- A 13.9% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 30.0% in 1992 to 16.1% in 2002).
- Prevalence rates that were lower than corresponding national rates for smoking (21.1% in Minnesota versus 22.0% nationally); and for women older than age 18 who reported not having had a Pap smear (15.2% in Minnesota versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Minnesota in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Minnesota, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) *Minnesota BRFSS*	$253,888
National Program of Cancer Registries *Minnesota Cancer Surveillance System*	$904,262
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program *Minnesota Heart Disease and Stroke Prevention Initiative* *Cardiovascular Health State Plan*	$335,869
Diabetes Control Program *The Impact of Diabetes in Minnesota*	$900,000
National Breast and Cervical Cancer Early Detection Program *SAGE Screening Program*	$3,619,999
National Comprehensive Cancer Control Program *Comprehensive Cancer Control Planning*	$149,999
WISEWOMAN	$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program *Minnesota Tobacco Prevention and Control Program*	$1,030,395
State Nutrition and Physical Activity/Obesity Prevention Program	$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	$0
Total	**$7,194,412**

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Minnesota that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.

Opportunities for Success

Chronic Disease Highlight: Cardiovascular Disease

According to CDC mortality data, between 1996 and 2000, Minnesota had a heart disease death rate that was lower than the national average (384 per 100,000, compared with 536 per 100,000). Between 1991 and 1998, however, Minnesota had a stroke death rate that was higher than the national average (125 per 100,000, compared with 121 per 100,000). In 2001, there were more than 70,000 hospital discharges in Minnesota, with a primary diagnosis of cardiovascular disease (CVD) representing more than 11% of all of the discharges. These CVD patients incurred total inpatient costs of more than $1.4 billion. Of these charges, $626 million were due to heart disease and $205 million were due to stroke.

Although Minnesota has low heart disease and stroke death rates, the state has focused its attention on lowering the prevalence of modifiable risk factors associated with these and other chronic conditions. According to 2003 data from the Behavioral Risk Factor Surveillance System, 38% of Minnesota adults reported being overweight. Of great concern is the rising percentage of obese individuals in the state; in 1990, 10% of individuals were obese, and by 2003, the percentage had grown to 23%. Physical inactivity is also a serious problem for children and adolescents. According to the 2001 Minnesota Student Survey, 12% of 6th graders, 14% of 9th graders, and 21% of 12th graders reported having no physical activity within a given week. Poor nutrition is also a concern. In 2003, 24% of Minnesota adults reported eating at least 5 fruits and vegetables per day. Among youth, approximately 22% of 6th graders, 15% of 9th graders, and 12% of 12th graders reported consuming 5 or more fruits, fruit juices, or vegetables per day. In 2003, approximately 22% of adults in Minnesota reported that they had been diagnosed with high blood pressure—a percentage that has remained constant throughout the last decade.

The *Minnesota Heart Disease and Stroke Prevention Plan 2004-2010* was developed to provide a blueprint for collaboration among individuals, communities, and organizations that implement strategies to reduce CVD risk factors, incidence, complications, and mortality rates. The plan outlines intervention strategies that address environmental and policy change at multiple levels of society in addition to strategies aimed at improving medical treatment.

Text adapted from *Cardiovascular Disease in Minnesota, 2003 Report and the Minnesota Heart Disease and Stroke Prevention Plan* 2004-2010.

Disparities in Health

Across the country, American Indians and Alaska Natives (AI/ANs) comprise more than 500 federally recognized tribes and represent 1% of the U.S. population. Compared with other racial and ethnic minorities, AI/ANs have the highest poverty rate, 26%, which is 2 times the national rate. In addition to high poverty levels, AI/ANs are experiencing growing health disparities.

Minnesota's AI/ANs make up 1.1% of the state's population. Although they live in one of the healthiest states in the country, they experience marked health disparities, and due to high poverty rates and economic insecurity, are less likely to have continuous health insurance and access to health care resources. The 2001 *Minnesota Health Access Survey* revealed that Minnesota's AI/ANs were more than 3 times more likely to be uninsured than whites (16.2% for AI/ANs versus 4.6% for whites). Age-adjusted cardiovascular disease death rates for Minnesota AI/ANs were considerably higher than all other ethnic/racial populations in the state. Between 1998 and 2002, the heart disease death rate for AI/ANs was 36% higher than the same death rate for non-Hispanic whites.

Diabetes, a major risk factor for CVD, affects a larger percentage of AI/ANs than whites. In 1997, the Indian Health Service reported that the age-adjusted prevalence of diagnosed diabetes among AI/ANs aged 20 and older among tribes in Michigan, Minnesota, and Wisconsin was 15.2%.

Other Disparities

- **Women and Cardiovascular Disease:** In Minnesota, from 1996 to 2000, Asian/Pacific Islander women aged 35 and older had the lowest heart disease death rate (150 per 100,000) compared with African American (313 per 100,000), AI/AN (378 per 100,000), and white women (290 per 100,000) in the same age group. Hispanic women aged 35 and older had the second lowest heart disease death rate (199 per 100,000).
- **Stroke:** Minnesota's stroke death rates are 50% higher for African Americans and 24% higher for Asian/Pacific Islanders than for non-Hispanic whites. Between 1998 and 2002, African American men had a 53% higher stroke death rate than non-Hispanic white men.
- **Diabetes:** In Minnesota, Hispanics, who make up 2.9% of the population, are 1.7 times as likely as whites to die from diabetes.

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